## PROGRESS REPORT FOR PERIOD ENDING SEPT. 30, 2000 DOE Award DEFG0398ER62605 The Accelerated Climate Prediction Initiative (ACPI)

#### CAUTION/DISCLAIMER

The results given on this web site announce a new capability that will need to be exercised and refined many times before such results can be considered quantitatively reliable guides for policy makers and other potential users of this information. They represent ongoing, unpublished research that has not been vetted in formal scientific review and, therefore, should not be used as a guide to the future or referenced in any way. In the meantime, the results do raise a number of important issues and questions. It is important for policy makers and other users to know that such questions are being asked and now can be answered, albeit with unknown accuracy. Moreover, since we are dealing with long-term climate change, we expect the capability to do this kind of projection will improve significantly by the time it is necessary to use it. So the reader is advised that the results discussed, particularly in Element 3, are highly preliminary. We cannot, at this time, estimate their reliability and/or uncertainty. They are not for public or private use or dissemination to others.

The ACPI Pilot comprises three elements. Within each element are several avenues of study headed by one or more Principal Investigators. The progress report is organized according to these elements and avenues of study. Additional information can be found on the SIO ACPI web sites <a href="http://meteora.ucsd.edu/~meyer/acpi\_calif.html">http://meteora.ucsd.edu/~meyer/acpi\_calif.html</a> and <a href="http://goldhill.cgd.ucar.edu/pcm/">http://goldhill.cgd.ucar.edu/pcm/</a> under ACPI Pilot Project, on the NCAR web site.

### **Element 1 – Ocean Initial Conditions**

Naval Postgraduate School (Tokmakian, Semtner)

Restart File for PCM (Pierce and Barnett, SIO)

10-26-2000

See http://cirrus.ucsd.edu/~pierce/acpi pilot/progrpt 2000-10.html

Model Incompatibility (Maltrud and Lysne, LANL)

# **Element 2: Modeling Anthropogenic Climate Change**

#### PCM (Washington, NCAR)

See http://www.cgd.ucar.edu/pcm/ACPI/progrepoct00.html

# **Element 3: Downscaling climate**

#### Linkage with GCM modeling effort (Leung, PNNL)

See <a href="http://www.pnl.gov/atmos\_sciences/Lrl/pnnl.html">http://www.pnl.gov/atmos\_sciences/Lrl/pnnl.html</a> and link to First Quarter Progress

### Downscaling Project (Roads and Han, SIO)

Quarterly Report I: Jul. 1, 2000-Sept. 30, 2000 See http://ecpc.ucsd.edu/projects/acpi/200010 ACPI Quarterly Report I.htm

# Hydrology, Water Resources, and Habitat (Wigmosta and Vail, PNNL)

See http://inrm.labworks.org/acpi/documents/acpi3team.htm

Investigation of Climate Change Impacts on Water Resources and Fire Weather in the California region (D. Cayan and A. Westerling SIO; M. Dettinger and R. Hanson, USGS; T. Brown, DRI)

See http://meteora.ucsd.edu/~meyer/acpi calif.html

NOTE: Progress for July-Sept is included in the Oct-Dec report.